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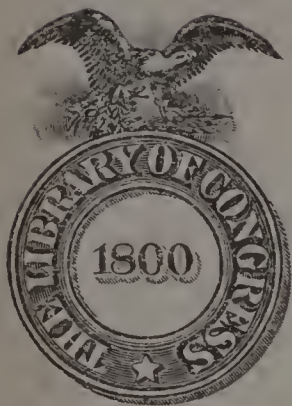
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United States Veterans' Bureau
Rehabilitation Division

Instructions No. 133, Revised

Expenditures allowed for Books
Tools and Accessories
Stationery and Supplies for
Men in Training

UB 357

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1921

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November, 1921



Washington
Government Printing Office
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INSTRUCTIONS NO. 133 (REV.).

UNITED STATES VETERANS' BUREAU.

Rehabilitation Division.

All district managers and others concerned are charged with the duty of following the instructions given below:

(a) The expenditures and the equipment listed herein represent a *maximum* and the entire equipment or the entire expenditure should not be given or incurred unless the circumstances necessitate it.

(b) Specific arrangements must be made when equipment is given, to receive an itemized receipt from the trainee for every article and the receipt shall contain the valuation of the article. Records must be so kept that it is possible to tell where all tools are at a given time.

(c) The equipment, loaned to the trainee during training, is the property of the United States Government. Nonexpendable equipment must be returned at the termination of training, at which time such portion as may be necessary for the trainee in the employment for which trained may be released to him under the condition stated herein.

(d) All equipment must be plainly marked either by metal tag, by steel letters, or by etching, as follows:

Property of the United States	Steel letters,
U. S. Veterans' Bureau	U. S. V. B., $\frac{1}{8}$ -inch face.

Drawing instruments and fine tools to be etched.

SECTION A.

Allowances for men training in "institutions" (schools and colleges).

1. The authorized expenditure per trainee during any fiscal year is as follows:

Trades and industrial courses.

Books	\$25
Tools and accessories	50
Stationery	5
Supplies	20

Commercial courses.

Books	\$35
Stationery and supplies	20

¹ Expenditures within these limits are subject to certification Form 4502A (F. B. 555A) as necessary and required of all students pursuing the same course. Central office copy of Form 4502A (F. B. 555A) will be attached to the voucher when submitted to central office for payment.

If necessary, the total allowed in any course may be allocated under any head or heading in the same course.

The purpose of the classification in this table is to suggest to district offices what experience has proved to be the usual amounts expended under these heads for trainees pursuing these courses.

Agricultural courses.

Books	\$50
Tools and accessories.....	25
Stationery and supplies.....	25

Professional courses.

(Except courses enumerated in note A and note B.)

Books	\$50
Stationery and supplies.....	50

NOTE A.--For regular medical courses, special medical courses, mechanical dentistry, dental surgery, dentistry, pharmacy, and embalming a maximum expenditure of \$150 per fiscal year may be allowed; but where conditions make it necessary any two consecutive years may be combined into a single period, during which a maximum of \$300 may be expended.

NOTE B.--In music courses, in addition to the \$100 allowed for books, stationery, and supplies, \$100 may be allowed for purchase or rental of instrument, when necessary.

2. For training in optometry, photography, watch repairing, navigation, and acetylene welding, when the necessary expenditure for material required of all regular students exceeds \$150 in a fiscal year, the district manager is authorized to purchase such material for the trainee without prior approval of central office, provided the responsible official of the institution certifies that the material is necessary and required of all students pursuing the same course; such purchases shall be made in accordance with the procedure set forth under "Bids," to an additional amount not to exceed \$100.

3. If it is proposed to expend amounts in excess of the amounts prescribed in these instructions, or it is desired to furnish material not customarily required of regular students, an itemized list showing cost, signed by a

responsible officer of the training institution, together with a letter from the district manager explaining fully the necessity for the purchase of these articles, must be submitted to central office for prior authority. All proposals from institutions for tools and individual equipment should be carefully scrutinized by the responsible supervisor in the light of the information given in the "exhibits" attached hereto. No protective clothing shall be purchased without prior approval of central office. Requests for purchases of protective clothing must give details showing clearly its necessity.

BULK PURCHASES.

4. Where the Bureau is required to furnish student supplies which can be bought more economically by the district office and distributed to individual trainees as required, such purchases are authorized not to exceed \$250 without prior approval of central office.

5. In cases where books, tools, accessories, stationery, and supplies are furnished to institutions, a receipt signed by a responsible representative of the institution shall be forwarded to the district office.

SECTION B.

Allowances for men training "on the job."

6. Section B of these instructions authorizes the purchase of equipment for certain trades and occupations set forth in exhibits made a part hereof. Variation from the lists in these exhibits is permissible provided the amount allowed is not exceeded and the nature of the particular work necessitates a variation. *For men in training on*

the job purchases not to exceed \$25 can be made in the case of any one man training in an occupation not covered by an exhibit.

7. When it is necessary to purchase equipment at a cost in excess of \$25 for men in job training in trades or occupations not covered by one of the exhibits referred to above, the prior approval of central office is necessary.

8. Before making purchases or requesting the approval of central office to purchase, careful consideration should be given as follows:

(a) Men in training "on the job" having been previously in training in school may have been furnished certain tools. Special care should be exercised in such cases to prevent duplication of allowance.

(b) The employment objective in all cases must be determined before intelligent action can be taken to decide proper and adequate equipment for training.

(c) Be assured that the tools, etc., are actually required and that they are not usually supplied by the establishment with which the man has been placed for training, or by other establishments under similar circumstances.

(d) It is the aim of the Bureau to furnish men *only such equipment as is actually necessary for their efficient training* and not all the tools used in the trade or occupation.

(e) While a statement of the man in training or of the establishment with which the man has been placed in training is desirable, it can not be accepted in all cases as assurance that certain tools are actually required or that they are going to be used exclusively by the man in training.

(f) Estimate what tools and equipment are required by the man during the first few months rather than supply

him with tools he will only be able to use after months of training. Additional equipment may be furnished as the man's progress warrants.

(g) For men training "on the job" only handbooks or textbooks, not in excess of \$10, which are used directly in connection with the man's training, are allowed.

(h) The amount of \$25 authorized in paragraph 6 for the purchase of equipment for men training on the job includes the amount allowed for books provided in subparagraph "g" above.

(i) For those trades covered by exhibits the \$10 allowed for books in subparagraph "g" is in addition to the maximum allowance allowed in the exhibit.

(j) No protective clothing shall be purchased without prior approval of central office. Requests for purchases of protective clothing must give details showing clearly its necessity.

EXHIBITS.

9. With the view of expediting the furnishing of tools, etc., central office authorizes district offices to purchase the specified equipment for men training "on the job" for certain trades as set forth in the attached exhibits and also in any exhibits hereafter issued.

10. Equipment listed in each exhibit is the maximum allowance for that trade or occupation and is to be issued at appropriate periods of the man's training as set forth in the exhibit. Should it be considered necessary to furnish additional equipment, reasons substantiating such a claim must be submitted to central office before authorization can be granted. In such cases where men have had previous experience or display unusual adaptability it is obvious that the time element does not govern.

11. When training embraces two or more allied occupations or trades, tools and equipment not to exceed \$25 in value may be selected from exhibits governing the allowances from the trades involved. Should equipment in excess of \$25 be required, approval of central office is necessary. When requesting approval, it is necessary to justify such training, especially stating the employment objective.

NECESSARY EXPENDITURES IN EXCESS OF PRESCRIBED AMOUNTS.

12. If it is necessary to secure the approval of central office before purchase is made in the case of men in training "on the job," a letter giving the information called for below should be forwarded:

(a) Name of trainee.

(b) Occupation for which man is training as indicated on Form 107 or 107A in effect; *also state clearly the employment objective in employment terms in common use.*

(c) Name and address of establishment with which the man is in training.

(d) Advise cost of equipment *previously furnished* giving a clear and brief description of each article.

SECTION C.

GENERAL INSTRUCTIONS.

13. When the institution furnishes books, tools and accessories, stationery and supplies, under contract, a responsible official of the institution will be required to certify that materials so furnished are necessary and required of all students pursuing the same course.

BIDS.

14. Unless supplies are furnished under a contract providing for furnishing by the institution, proposals, Form 1211 (F. B. 21A Rev.) must be sent to not less than three prospective bidders. If competition is impracticable, explanation should be submitted with the voucher. If the amount to be expended does not exceed the limits set forth in these instructions, the district manager may place the order in accordance with the bid most advantageous to the Government without sending these bids to central office for selection and prior approval. In ordering from vendors specifications concerning each article should be complete.

15. In submitting bids to central office with voucher, Form 3222 (F. B. form 3), the following instructions should be complied with:

All bids must be submitted in triplicate, the first two copies being executed by vendor. If the bidder is an individual, his hand-written signature must appear below the quotation. If the bidder is a firm, the proposal must be signed not only with the firm name but also with the hand-written signature of a responsible person in the concern, and show the capacity in which he signs. Bids received at central office improperly drawn will be at once returned for redrawing.

TRAINEE'S PURCHASE ORDER, FORM 4502A (F. B. 555A).

16. The authority for signing the certification Paragraph III of the trainee's purchase order, Form 4502A (F. B. 555A) should be delegated by the district manager to an authorized representative of the Bureau at the place of training or at the institution. If considered advisable

by the district manager and purchasing agent, supplies of Form 4502A (F. B. 555A) and Form 1211 (F. B. 21A, Rev.) bearing the signature of the purchasing agent may be issued to the parties designated by the district manager or the purchasing agent may arrange to sign the trainee's purchase orders, Form 4502A (F. B. 555A) after the equipment itemized thereon has been approved by the proper official. Form 4502A (F. B. 555A) must be used to cover all purchases except when the institution furnishes supplies under contract. Form 4502A (F. B. 555A) is an individual purchase order and should never be used as a memorandum receipt. In each instance four copies of Form 4502A (F. B. 555A) shall be made. Form 4502A (F. B. 555A) will be distributed as follows: The original (dealer's copy) will be forwarded to the dealer to be retained by him as his record of the transaction; the district office copy and the central office copy will be forwarded to the district office, one to be retained and the other to be forwarded to central office with the voucher. The sub-office copy will be retained and filed in the trainee's folder in the suboffice.

Unsigned copies of Form 4502A (F. B. 555A) will be accepted by central office, but fully executed copies should be required in the district office as a basis for the proper certification of vouchers as well as for future reference.

17. An accurate record must be kept on the standard cards provided showing all purchases for trainees in order that the district manager may properly certify vouchers.

VOUCHERS.

18. Upon receipt of bills from vendors, district offices will prepare vouchers itemized in accordance with purchase orders and forward them for the vendor's signature. Upon return from the vendor they will be approved by the purchasing agent, signed by the district manager, and forwarded to central office accompanied by the trainee's purchase order.

19. Vouchers prepared to cover supplies, etc., furnished trainees must carry the following certification by the district manager that the amounts expended for such trainees do not exceed the maximum described in these instructions:

"I certify that these purchases were made in accordance with Instructions No. 133 (Rev.).

"Signed.....

"D. M. No

"Date"

Do not typewrite or inscribe this legend upon the face of the voucher, but have it mimeographed on a slip to be attached to the voucher.

20. Receipts should be obtained on the trainee's purchase order, Form 4502A (F. B. 555A), from all trainees to whom books, tools and accessories, stationery and supplies are furnished, except when supplies are furnished by the institution under contract; in these cases signature should appear on the district office file copy of the schedule, or on memorandum charge slips furnished by the institution.

SHIPPING EXPENSES.

21. Where it is contemplated that the vendor will be called upon to ship equipment f. o. b. his factory to other points in the United States, and the prices quoted by him do not include shipping expenses, the bids should clearly show that the prices quoted are f. o. b. In such cases Government bill of lading should be sent to the firm awarded the contract. If it is impracticable to use Government bill of lading, however, the contractor is to bill the expenses for shipment against the United States Veterans' Bureau, the claim for such charges must be supported by receipted transportation bills, and letter from the district manager must also accompany the voucher explaining why Government bill of lading was not used.

DISPOSITION OF PROPERTY.

22. All tools and equipment furnished under the provisions of these instructions are the property of the United States and are loaned to trainees to permit them to efficiently pursue their training.

(a) If a man's training is changed to institutional training, which is in line with training "on the job" or vice versa, he should be allowed to retain such equipment furnished him as may be deemed necessary.

(b) If a trainee discontinues training and enters upon an occupation not related thereto, he should return the non-expendable articles purchased on his account.

(c) If he enters employment in line with his training such part of the equipment furnished him as is *absolutely necessary* to engage in employment (not in business for himself) *may be* released to the trainee. The amount of equipment released should not exceed the maximum

allowed in Instructions 133 Rev. for the period of time the trainee received training under the jurisdiction of the United States Veterans' Bureau, or the amount furnished him through special authorization from central office.

(d) Receipts in triplicate for such delivery should be obtained from the trainee and forwarded to the district office for the necessary record. The district office will forward two to central office.

(e) Nonexpendable materials returned in accordance with subparagraph (b) above will be reissued to other trainees; if such material is not serviceable it should be disposed of in accordance with the provisions of the property accounting procedure of the Bureau.

(f) When a unit of training is completed such nonexpendable materials as have been issued and are not necessary for use in succeeding units of training, except those subject to disposition under subparagraph (e), shall be returned by the trainee.

(g) The Chief, Administration Division, is hereby authorized to make purchases under the provisions of Inst. 133 Rev., and is hereby designated as purchasing agent.

C. R. FORBES, *Director,*
United States Veterans' Bureau.

EXHIBITS.

Exhibit No. 1.—Equipment for Men Training as Cabinetmakers.

First three months:

1 claw hammer.....	}	¹ \$35
1 plane (smooth).....		
1 plane (jack).....		
1 plane (block).....		
1 26-inch—8 point saw.....		
2 screw drivers.....		
1 cabinet maker's scraper.....		
1 try square.....		
1 coping saw.....		
1 carborundum stone.....		
2 gauges.....		
1 rule.....		
1 pair dividers.....		
1 set of (7) socket chisels $\frac{1}{4}$ to 1 inch.....		
1 oil can.....		

Next nine months:

1 fine cut-off saw.....	}	¹ \$25
1 brace.....		
1 set of bits.....		
1 set of drills.....		
1 steel square.....		
1 back saw.....		
1 level.....		
1 rabbet plane.....		

¹ Should permit the purchase of *all the tools* for specified period. When only part of these tools is purchased the expenditure should be proportional.

To complete training:

1 large jointer.....	}	¹ \$15
1 miter square.....		
1 bevel square.....		
1 router plane.....		
1 Yankee screw driver.....		
1 expansion bit $\frac{1}{2}$ to $1\frac{1}{2}$ inches.....		
1 tool box (not to exceed \$15).....		

\$90, maximum amount to be spent.

*Exhibit No. 2.—Equipment for Men Training as
Wood-Pattern Makers.*

First three months:

1 claw hammer.....	}	¹ \$35
1 spoke shave.....		
2 chisels.....		
1 plane, jointer.....		
1 plane, block.....		
1 marking gauge.....		
1 nail set.....		
1 combination square with center head.....		
1 pair dividers.....		
1 pair calipers, inside.....		
1 pair calipers, outside.....		
1 paring knife.....		
1 bevel.....		
1 screw driver.....		
1 oilstone.....		
1 alcohol lamp.....		
1 oil lamp.....		

¹ Should permit the purchase of *all the tools* for specified period. When only part of these tools is purchased the expenditure should be proportional.

Next nine months:

3 shrink rules (iron-brass combination metal).....	}	¹ \$30
3 gouges, bent-shank.....		
1 set turning tools.....		
1 set bits.....		
1 bit brace.....		
1 pair pliers.....		
1 plane, router.....		
1 slip stone.....		

To complete his training:

4 chisels.....	}	¹ \$35
1 plane, rabbet.....		
1 pair trammel points.....		
1 bevel protractor (to fit combination square provided in first period).....		
6 spoon gauges.....		
1 plane core box.....		
1 2-foot square.....		
1 surface gauge.....		
1 set drills.....		
1 rose countersink.....		
1 panel gauge.....		
1 panel saw.....		
1 back saw.....		
1 keyhole saw.....		
1 expansion bit.....		
1 tool box (not to exceed \$15).....		

\$115, maximum amount to be spent.

¹ Should permit the purchase of *all the tools* for specified period. When only part of these tools is purchased the expenditure should be proportional.

Exhibit No. 3.—Equipment for Men Training as Carpenters.

First three months:

1 crosscut saw.....	}	¹ \$25
1 rip saw.....		
1 claw hammer.....		
1 hatchet—half.....		
1 jack plane.....		
1 2-foot square.....		
2 chisels.....		
1 nail set.....		
1 2-foot rule.....		
1 nail cutter.....		
1 Yankee screw driver (3 bits).....		

Next six months:

1 carpenter's level.....	}	¹ \$20
1 set compass saws.....		
4 socket chisels.....		
1 ratchet brace.....		
1 sharpening stone.....		
1 saw set.....		
1 6-inch square.....		
4 auger bits.....		
1 bevel.....		
1 compass and pencil holder.....		

¹ Should permit the purchase of *all the tools* for specified period. When only part of these tools is purchased the expenditure should be proportional.

To complete training:

1 fore plane (jointer).....	}	¹ \$25
1 6-inch block plane.....		
1 large extension bit—two cutters.....		
1 small extension bit—two cutters.....		
1 coping saw.....		
1 mortise gauge.....		
2 gauges.....		
1 countersink bit.....		
1 Yankee automatic drill.....		
1 spoke shave.....		
1 butt chisel.....		
1 butt gauge.....		
1 tool box (approximate cost \$10).....		

\$80, maximum amount to be spent.

Exhibit No. 4.—Equipment for Men Training as General Machinists (not specialists or machine hands).

Let it be understood that this authority is for men training as *machinists* in the general sense of the term; not men working in specialized lines as machine operators, monotype or linotype machinist, sewing machine and typewriter repairmen, etc.

¹ Should permit the purchase of *all the tools* for specified period. When only part of these tools is purchased the expenditure should be proportional.

First three months:

1 pair outside spring calipers (choice 2, 3, 6, and 12 inch).....	} ¹ \$20
1 pair inside spring calipers (choice 2, 3, 6, and 12 inch).....	
1 pair spring dividers (choice 2, 3, 6, and 12 inch).....	
1 lock joint hermaphrodite calipers (choice 4, 6, 8, and 10 inch).....	
1 6-inch spring tempered scale (any graduation).....	
1 12-inch combination set, with hardened blade (without bevel protractor).....	
1 center gauge (spring tempered).....	
1 center punch.....	
1 scribe (complete).....	
1 ball peen hammer (suitable size).....	
1 monkey wrench (suitable size).....	
1 pliers (suitable size).....	
1 screw driver.....	

Next nine months:

1 scale depth gauge.....	} ¹ \$20
1 thread gauge.....	
1 surface gauge (3-inch base with 9 and 12 inch spindles).....	
1 scale (choice of 1, 2, 3, 4, and 9 inch.....	
1 1-inch micrometer and case.....	

¹ Should permit the purchase of *all the tools* for specified period. When only part of these tools is purchased the expenditure should be proportional.

After one year:

1 thickness gauge.....	} ¹ \$25
1 bevel protractor (to fit 12-inch combination set allowed in first period).....	
1 micrometer depth gauge and case.....	
1 4 $\frac{5}{16}$ -inch solid steel square.....	
1 tool box (approximate cost \$10).....	

\$75, maximum amount to be spent.

Exhibit No. 5.—Equipment for Men Training as Tool and Instrument Makers.

First three months:

1 pair outside calipers (choice 2 to 6 inches).....	} ¹ \$15
1 pair inside calipers (choice 2 to 6 inches)....	
1 pair dividers.....	
1 hermaphrodite caliper (choice 4 to 10 inches)	
1 12-inch combination set (scale, square base, centerhead).....	
1 small scale (2 to 6 inches).....	
1 ball peen hammer (light).....	
1 scriber (complete).....	
1 center punch (small).....	

Next nine months:

1 depth gauge.....	} ¹ \$20
1 micrometer, 1/10000.....	
1 thread gauge (small teeth up to 60).....	
1 thickness gauge.....	
1 surface gauge (tool makers with auxiliary guide).....	

¹ Should permit the purchase of *all the tools* for specified period. When only part of these tools is purchased the expenditure should be proportional.

After one year:

1 center tester.....	} ¹ \$35
1 bevel protractor (universal).....	
1 micrometer depth gauge.....	
1 small solid steel square (choice up to 4½ inches).....	
1 set of clamps (choice of tool makers or parallel).....	
1 tool box (approximate cost \$10).....	

\$80, maximum amount to be spent.

Exhibit No. 6.—Equipment for Men Training as Linotype Machinists.

- 1 8-ounce machinist's hammer.
- 1 extension hack saw.
- 6 peerless hack saw blades.
- 1 4-inch Stubbs' hand vise.
- 1 5-inch Billings wrench, nickel.
- 1 5½-inch duck nose pliers, polished.
- 1 5½-inch Bernard cutting pliers.
- 1 2½-inch screw driver.
- 1 4-inch machinist's screw driver.
- 1 7-inch machinist's screw driver.
- 1 2-inch thin steel square.
- 1 6-inch steel straight edge.
- 1 10-inch file, second cut.
- 1 10-inch file, bastard.
- 1 6-inch file, square taper.

¹ Should permit the purchase of *all the tools* for specified period. When only part of these tools is purchased the expenditure should be proportional.

- 1 6-inch file, hand smooth (Swiss).
- 1 6-inch file, knife No. 4 (Swiss).
- 1 6-inch file, round, fine (Swiss).
- 6 handles for files.
- 1 tap wrench.
- 1 tap each $\frac{8}{32}$, $\frac{6}{32}$, $\frac{4}{32}$, $\frac{1}{24}$.
- 1 drill each 16, 26, 32, 35, 42.
- 2 drills, No. 52.
- 1 hand drill to take $\frac{1}{4}$ inch.
- 3 punches, $\frac{1}{16}$, $\frac{1}{8}$, $\frac{5}{32}$.
- 1 center punch.
- 1 $\frac{1}{4}$ -inch Jessup steel cold chisel.
- 1 $\frac{1}{2}$ -inch Jessup steel cold chisel.
- 1 brass rod $\frac{3}{4}$ by 6 inches.

\$45, maximum amount to be spent.²

SPECIAL NOTE.—The Mergenthaler Linotype Co. sells a special kit which includes all of the equipment listed herein and as all linotypes are made by this company, this kit will equip any trainee for linotype machinist. Therefore, the purchase of this kit is especially desirable.

Exhibit No. 7.—Equipment for Men Training as Monotype Machinists.

- 1 micrometer that will measure $\frac{1}{100000}$.
- 1 hand drill (small) to take drills up to $\frac{1}{4}$ inch.
- 1 combination square, 6 inches.
- 1 hammer (small), ball peen.
- 1 monkey wrench.
- 2 files (choice).
- 2 screw drivers, one large, one small.
- 1 $\frac{1}{8}$ -inch drill.

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

- 1 No. 50 drill.
 - 1 special drill made of $\frac{3}{16}$ -inch drill rod about 10 inches long, forged at one end and ground for pump body arm, for monotype.
 - 2 brushes, one with stiff bristles, one with small flat, soft bristles.
 - 1 pair of pipe tongs, 10 or 12 inches for handling pump body.
- \$30, maximum amount to be spent.²**

Exhibit No. 8.—Equipment for Men Training as Auto Mechanics.

- 1 ball peen hammer.
 - 2 screw drivers.
 - 1 inside calipers, 6 inches.
 - 1 outside calipers, 6 inches.
 - 1 dividers, 6 inches.
 - 1 monkey wrench.
 - 1 pair pliers, 6-inch combination.
 - 1 set open, double-end wrenches.
 - 1 8-inch Stillson wrench.
 - 1 crescent wrench.
 - 1 cotter pin extractor.
 - 1 cold chisel.
 - 1 thickness gauge.
 - 1 6-inch scale.
 - 3 8-inch files and handles.
 - 1 $\frac{1}{2}$ -inch drive punch.
 - 1 $\frac{1}{4}$ -inch center punch.
 - 1 tool kit or box (approximate cost \$5).
- \$35, maximum amount to be spent.²**

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

***Exhibit No. 9.—Equipment for Men Training in
Auto Ignition—Starting and Lighting.***

- 1 6-inch rule (choice graduation).
- 1 feeler gauge (fine blades).
- 2 platinum point files.
- 1 electrician knife.
- 1 hammer.
- 1 pair auto mechanic pliers.
- 1 pair diagonal pliers.
- 1 monkey wrench.
- 1 Stillson wrench.
- 2 screw drivers.
- 1 set open end wrenches.
- 1 set ignition wrenches.
- 1 set 5-pin punches.
- 1 offset screw driver.
- 1 long-shank screw driver.
- 1 adjustable hacksaw frame.
- 2 cold chisels.
- 1 small hand drill.
- 1 pair long nose pliers.
- 1 tool kit or box (approximate cost \$5).

\$40, maximum amount to be spent.²

² Should permit the purchase of all the tools. When only part of these tools is purchased the expenditure should be proportional.

***Exhibit No. 10.—Equipment for Men Training in
Tire Repairing and Vulcanizing.***

- 1 tire rasp (half round).
- 1 rule.
- 1 try square.
- 1 pair scissors straight.
- 1 pair scissors curved.
- 1 end cutting rubber knife (plain end).
- 1 end cutting fabric knife (notched end).
- 1 trimming knife.
- 1 awl.
- 1 pair round nose pliers.
- 1 pair tweezers.
- 1 stitcher.
- 1 tread roller.
- 1 pair combination pliers.

\$20, maximum amount to be spent.²

***Exhibit No. 11.—Equipment for Men Training in
Tractor Mechanics.***

- 1 adjustable end wrench.
- 4 punches.
- 1 center punch.
- 1 Stillson wrench.
- 2 screw drivers (large and small).
- 2 pair pliers.
- 1 monkey wrench.
- 2 chisels.

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

- 2 machinist hammers (heavy and light).
- 1 set end wrenches.
- 1 hack-saw frame.
- 1 pair inside calipers.
- 1 pair outside calipers.
- 1 6-inch scale.
- 1 carrying kit or box (approximate cost \$5).

\$30, maximum amount to be spent.²

***Exhibit No. 12.—Equipment for Men Training as
Oxy-Acetylene Welders.***

- 1 rule, 48-inch, folding.
- 1 ball peen hammer (medium weight).
- 1 cold chisel, flat.
- 1 cold chisel, cape.
- 1 pair oxy-acetylene welders' goggles.
- 1 screw driver.
- 1 pair pliers, 8-inch, combination.
- 1 monkey wrench, 6 to 12 inches.
- 1 pair inside calipers, 6-inch.
- 1 pair outside calipers, 6-inch.
- 1 pair dividers, 10-inch.
- 1 tool box (approximate cost \$5).

\$25, maximum amount to be spent.²

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

Exhibit No. 13.—Equipment for Men Training as Sheet-Metal Workers.

- 1 pair shears (circular blades).
- 1 pair shears (straight).
- 2 hammers (light and heavy).
- 6 punches (various sizes).
- 2 center punches (small, large).
- 2 pliers.
- 1 4-foot rule.
- 1 scribe.
- 1 divider.
- 2 chisels.
- 1 wooden mallet.
- 1 metal box (approximate cost \$5).

\$25, maximum amount to be spent.²

Exhibit No. 14.—Equipment for Men Training as Draftsmen.

- 1 T square.
- 1 drawing board.
- 2 angles.
- 1 irregular curve.
- 1 drawing set (to cost not more than \$15).
- 1 draftsman's ruler.
- 1 eraser, rubber.
- 1 eraser, steel.
- 1 protractor.

\$30,- maximum amount to be spent.²

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

*Exhibit No. 15.—Equipment for Men Training as
Typewriter Repairmen (General).*

Miscellaneous tools:

1 pair 5-inch type and wire cutters.

1 pair 6-inch round-nose pliers.

1 pin punch.

1 center punch.

1 small hammer.

1 type hammer, copper.

1 repairman's tool kit.

1 tap wrench.

Drills—43, 30, 38, 28, 19, 16, 10, 32.

Taps—2/56, 5/40, 2/48, 1/32, 8/32, 12/24, 10/32, 4/36.

1 4-inch screw driver.

1 6-inch screw driver.

1 8-inch screw driver.

1 10-inch screw driver.

1 torch.

Remington typewriter tools:

1 align socket.

1 pair nine prongs.

1 pair wiring pliers.

1 pair No. 10 motion wrench.

1 Remington pull adjuster.

1 10-inch spring split screw driver.

Underwood typewriter tools:

1 Underwood escapment wrench.

1 Underwood link bender.

1 align wrench.

1 soldering device.

1 pair offsets.

L. C. Smith typewriter tools:

- 2 motion wrenches.
- 1 sublever bender.
- 1 escapement wrench.
- 1 split screw driver.

Oliver typewriter tools:

- 1 universal bender.
- 1 align wrench.
- 1 soldering device.
- 1 carrying case (approximate cost \$5).

\$70, maximum amount to be spent.²

*Exhibit No. 16.—Equipment for Men Training as
Remington Typewriter Specialists.*

Miscellaneous tools:

- 1 pair 5-inch type and wire cutters.
- 1 pair 6-inch round-nose pliers.
- 1 pin punch.
- 1 center punch.
- 1 small hammer.
- 1 type hammer, copper.
- 1 repairman's tool kit.
- 1 tap wrench.

Drills—43, 30, 38, 28, 19, 16, 10, 32.

Taps— $\frac{2}{56}$, $\frac{5}{40}$, $\frac{2}{48}$, $\frac{1}{32}$, $\frac{8}{32}$, $\frac{12}{24}$, $\frac{10}{32}$, $\frac{4}{36}$.

- 1 4-inch screw driver.
- 1 6-inch screw driver.
- 1 8-inch screw driver.
- 1 10-inch screw driver.
- 1 torch.

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

Remington typewriter tools:

- 1 align socket.
- 1 pair nine prongs.
- 1 pair wiring pliers.
- 1 pair No. 10 motion wrench.
- 1 Remington pull adjuster.
- 1 10-inch spring split screw driver.
- 1 carrying case (approximate cost \$5).

\$45, maximum amount to be spent.²

Exhibit No. 17.—Equipment for Men Training as Underwood Typewriter Specialists.

Miscellaneous tools:

- 1 pair 5-inch type and wire cutters.
- 1 pair 6-inch round-nose pliers.
- 1 pin punch.
- 1 center punch.
- 1 small hammer.
- 1 type hammer, copper.
- 1 repairman's tool kit.
- 1 tap wrench.

Drills—43, 30, 38, 28, 19, 16, 10, 32.

Taps—2/56, 5/40, 2/48, 1/32, 8/32, 12/24, 10/32, 4/36.

- 1 4-inch screw driver.
- 1 6-inch screw driver.
- 1 8-inch screw driver.
- 1 10-inch screw driver.
- 1 torch.

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

Underwood tools:

- 1 Underwood escapement wrench.
- 1 Underwood link bender.
- 1 align wrench.
- 1 soldering device.
- 1 pair offsets.
- 1 carrying case (approximate cost \$5).

\$40, maximum amount to be spent.²

***Exhibit No. 18.—Equipment for Men Training as
Oliver Typewriter Specialists.***

Miscellaneous tools:

- 1 pair 5-inch type and wire cutters.
- 1 pair 6-inch round-nose pliers.
- 1 pin punch.
- 1 center punch.
- 1 small hammer.
- 1 type hammer, copper.
- 1 repairman's tool kit.
- 1 tap wrench.
- Drills—43, 30, 38, 28, 19, 16, 10, 32.
- Taps—2/56, 5/40, 2/48, 1/32, 8/32, 12/24, 10/32, 4/36.
- 1 4-inch screw driver.
- 1 6-inch screw driver.
- 1 8-inch screw driver.
- 1 10-inch screw driver.
- 1 torch.

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

Oliver typewriter tools:

1 universal bender.

1 align wrench.

1 soldering device.

1 carrying case (approximate cost \$5).

\$30, maximum amount to be spent.²

*Exhibit No. 19.—Equipment for Men Training as
L. C. Smith Typewriter Specialists.*

Miscellaneous tools:

1 pair 5-inch type and wire cutters

1 pair 6-inch round-nose pliers.

1 pin punch.

1 center punch.

1 small hammer.

1 type hammer, copper.

1 repairman's tool kit.

1 tap wrench.

Drills—43, 30, 38, 28, 19, 16, 10, 32.

Taps—2/56, 5/40, 2/48, 1/32, 8/32, 12/24, 10/32, 4/36.

1 4-inch screw driver.

1 6-inch screw driver.

1 8-inch screw driver.

1 10-inch screw driver.

1 torch.

² Should permit the purchase of all the tools. When only part of these tools is purchased the expenditure should be proportional.

L. C. Smith typewriter tools:

2 motion wrenches.

1 sublever bender.

1 escapement wrench.

1 split screw driver.

1 carrying case (approximate cost \$5).

\$30, maximum amount to be spent.²***Exhibit No. 20.—Equipment for Men Training as Electricians (General).***

First six months:

1 rule (choice of 2 to 8 foot).....	}	¹ \$25
1 center punch (large).....		
2 screw drivers (choice of sizes).....		
1 Stillson wrench (choice of sizes).....		
1 claw hammer (medium weight).....		
1 pair side cutting pliers.....		
1 cold chisel, cape.....		
1 cold chisel, flat.....		
1 tool bag, box or carrying case (approximate cost \$10).....		
1 ball peen hammer.....		
1 jackknife.....		

¹ Should permit the purchase of *all the tools* for specified period. When only part of these tools is purchased the expenditure should be proportional.

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

To complete training:

1 hand blow torch.....	}	\$20
1 brace (ratchet).....		
1 bit, shank extension.....		
3 wood bits.....		
1 wood chisel.....		
1 hack-saw frame (12 blades).....		
2 files.....		
1 keyhole saw (set of blades).....		

\$45, maximum amount to be spent.

Exhibit No. 21.—Equipment for Men in Training in the Installation of Electrical Apparatus.

- 1 hammer.
- 1 8-inch plier.
- 1 rawhide mallet.
- 2 medium cold chisels.
- 1 pair shears.
- 1 8-inch S wrench, adjustable.
- 1 medium screw driver.
- 1 small screw driver.
- 1 pair diagonal pliers.
- 1 wire gauge.
- 1 12-inch hack-saw frame.
- 1 pair parallel pliers, 6-inch.
- 1 small breast drill.
- 1 dozen hack-saw blades.
- 1 tool bag or carrying case (approximate cost \$10).

\$35, maximum amount to be spent.²

¹ Should permit the purchase of *all the tools* for specified period. When *only part of these tools* is purchased the expenditure should be proportional.

² Should permit the purchase of *all the tools*. When *only part of these tools* is purchased the expenditure should be proportional.

Exhibit No. 22.—Equipment for Men Training as Armature Winders.

- 1 small screw driver.
- 1 large screw driver.
- 1 pair shears.
- 1 6-inch scale.
- 1 12-inch combination set (without bevel protractor).
- 1 center punch.
- 1 2-foot rule.
- 1 hack saw.
- 1 hand drill (small).
- 1 hammer.
- 1 flat pliers.
- 1 side cutting plier.

\$20, maximum amount to be spent.²

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

Exhibit No. 23.—Equipment for Men Training as Watchmakers.

First two months:

1 pair snipe-nose pliers.....	
1 flat-nose pliers.....	
1 round-nose pliers.....	
1 set (6) watchmaker's screw drivers.....	
1 pair light, fine-point tweezers.....	
1 pair heavy point tweezers.....	
1 eye loop, single focus.....	
1 hammer.....	
1 mallet.....	¹ \$25
1 vise (bench).....	
1 vise (hand).....	
2 watch brushes.....	
6 files, assorted.....	
1 knife (bench).....	
1 benzine cup.....	
1 oil container.....	
2 pin vises.....	

¹ Should permit the purchase of *all the tools* for specified period. *When only part of these tools is purchased the expenditure should be proportional.*

To complete training:

1 pair side-cutting nippers.....	}	¹ \$20
6 gravers for turning.....		
1 saw frame and blades.....		
1 alcohol lamp.....		
1 oil stone, 3 corner.....		
1 oil stone.....		
1 conical pivot burnisher.....		
1 square pivot burnisher.....		
1 dozen pivot broachers.....		
1 main spring punch.....		
1 pair truing calipers.....		

\$45, maximum amount allowed for above equipment.

To be allowed only when two or more men are in training with the same firm:

1 lathe with 10 chucks.....	}	¹ \$90
1 staking tool.....		

\$135, maximum amount to be spent when lathe and staking tool is purchased.

¹ Should permit the purchase of *all the tools* for specified period. When only part of these tools is purchased the expenditure should be proportional.

Exhibit No. 24.—Equipment for Men Training as a Jewelry Repairman or Jewelry Manufacturer.

- 1 flat pliers.
- 1 pointed pliers.
- 1 round ring pliers.
- 1 cutting pliers.
- 1 pair shears.
- 1 eye loop, magnifying.
- 1 spring dividers.
- 1 blowpipe.
- 1 scraper, hollow, with handle.
- 1 mandrel, ring.
- 1 spring gauge.
- 1 hammer, riveting.
- 1 saw frame.

\$25, maximum amount to be spent.²

Exhibit No. 25.—Equipment for Men Training as Jewelry Engravers.

- 1 engraver's block and ball, swivel, with adjustable pegs.
- 6 gravers, flat.
- 6 gravers, square.
- 1 oilstone (hard Arkansas), 6-inch.
- 3 needle files—1 half-round, 1 knife, 1 three-cornered.
- 3 escapement files—1 half-round, 1 knife, 1 three-cornered.
- 2 styluses or markers.
- 1 rule (engraver's small).
- 1 burnisher.

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

- 2 dozen handles (gravers).
- 4 gravers (line).
- 1 eye loop.
- 1 engraver's pad.
- 1 dividers.
- 1 calipers (inside).
- 1 calipers (outside).

\$50, maximum amount to be spent.²

***Exhibit No. 26.—Equipment for Men Training as
Precious-Stone Setters.***

First three months:

1 pump drill with adjustable chuck.....	} ¹ \$12
1 oilstone (hard Arkansas), 6-inch.....	
1 ring clamp, double-end.....	
1 eye loop, magnifying.....	
1 ring plier.....	
6 assorted files.....	

To complete training:

1 set of ball-setting burrs.....	} ¹ \$18
1 set of cone-shape burrs.....	
1 set of blunt cone-shape burrs.....	
1 ring-setting plier.....	

\$30, maximum amount to be spent.

¹ Should permit the purchase of *all the tools* for specified period. When only part of these tools is purchased the expenditure should be proportional.

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

Exhibit No. 27.—Equipment for Men Training as Optical Mechanics.

Prescription clerk:

1 P. D. (pupillary distance) rule.

Surface grinder:

1 pair calipers.

1 steel rule.

Edge grinder:

1 steel rule.

Mounter:

1 pair half-round pliers.

1 pair spring pliers.

1 pair angling pliers.

1 pair (Chappel) cutting pliers.

1 pair flat pliers.

1 pair all-round pliers.

1 pair strap pliers.

1 pair finger piece pliers.

1 pair stud pliers.

1 P. D. rule.

\$20, maximum amount to be spent.²

Exhibit No. 28.—Equipment for Men Training as Dental Mechanics.

1 gold file.

1 vulcanite file.

1 vulcanite chisel.

1 vulcanite scraper.

1 wax spatula.

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

- 1 plaster bowl.
- 1 soldering twisters.
- 1 charcoal block.
- 1 plain line articulators.
- 1 contouring pliers.
- 1 straight pliers.
- 1 curved shears.
- 1 straight shears.

\$25, maximum amount to be spent.²

***Exhibit No. 29.—Equipment for Men Training as
Electrotype Finishers.***

- 1 rawhide mallet.
- 1 flat chaser.
- 1 set finisher's revising chisels.
- 1 set finisher's revising punches.
- 1 finisher's straightedge.
- 1 hammer (finisher's).
- 1 set finisher's straightening punches.
- 1 pair finisher's calipers.
- 4 finisher's smashers.
- 1 12-inch sliding square.
- 1 India oilstone (choice).
- 1 set gravers.
- 1 steel divider.
- 1 metal snip.
- 1 engraver's glass.
- 2 chisel gravers (choice).
- 1 finisher's parallel rule.

\$40, maximum amount to be spent.²

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

Exhibit No. 30.—Equipment for Men Training as Photo-Engravers.

- 1 finisher's brush.
- 1 watchmaker's glass.
- 2 hand trimmers.
- 1 set angle tint tools.
- 1 set of 8 elliptic tint tools.
- 1 set flat gravers tools.
- 1 set round gravers tools.
- 1 set lining tools.
- 1 draw tool.
- 1 stone.
- 12 extra handles (graver).
- 1 divider.
- 1 engraver's marker.
- 1 finisher's oilstone.
- 1 burnisher.
- 1 flat chaser.
- 1 engraver's solid leather pad.
- 1 raising and stippling tools.
- 1 linen tester, glass.
- 1 steel rule.
- 1 eraser.

\$45, maximum amount to be spent.²

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

***Exhibit No. 31.—Equipment for Men Training as
Show-Card Writers and Sign Painters.***

- 4 screw-top cans.
- 1 sectional Mahl stick.
- 1 metal tel. brush case.
- 1 utility pallet cup, single.
- 1 utility pallet cup, double.
- 1 oiled wooden pallet (choice).
- 1 adjustable knife handle and 3 blades.
- 1 pouncing wheel.
- 1 T-square movable head (standard size).
- 1 triangle (standard size).
- 12 assorted show-card colors.
- 4 French lettering pencils (C. H.).
- 4 camel's-hair brushes, one stroke, flat.
- 4 golden oxford hair, one stroke, flat.
- 1 each of red sable show-card brushes, Nos. 2, 4, 6, 8, 10,
12, 16, 20.
- 3 lettering pens.
- 3 stripers.
- 1 sign painter's carrying kit (approximate cost \$10).
- \$50, maximum amount to be spent.²**

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

Exhibit No. 32.—Equipment for Men Training as Window Decorators and Merchandise Displayers.

- 1 dozen assorted red sable riggers.
- 25 sheets white cardboard.
- 1 compass.
- 1 brass ruler.
- 1 T square.
- 6 lettering pens.
- 1 9-inch triangle.
- 1 magnetic tack hammer.
- 1 pair felt slippers (for use when working in window).

\$15, maximum amount to be spent.²

Exhibit No. 33.—Equipment for Men Training as House Painters.

- 1 duster.
- 1 putty knife.
- 1 screw driver.
- 1 hand scraper.
- 1 claw hammer
- 1 pair pliers.
- 3 glass cutters.
- 1 3-foot rule.
- 1 combination knife (for glazing, etc.).

\$10, maximum amount to be spent.²

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

**Exhibit No. 34.—Equipment for Men Training as
Paperhangers.**

Tools needed upon entering training:

1 nail set.....	}	¹ \$30
1 pair shears.....		
1 seam roller.....		
1 hand scraper.....		
1 base trimmer.....		
1 screw driver.....		
1 pair pliers.....		
1 plumb bob.....		
1 chalk line.....		
1 3-foot rule.....		
1 claw hammer (medium).....		
1 paste brush.....		
2 stiff bristle smoothing brushes.....		
1 tool bag (approximate cost \$5).....		

Tools needed after 6 months of training:

1 straight edge.....	}	¹ \$15
1 pair heavy offset shears.....		
1 soft bristle brush.....		
1 smoothing roller.....		

\$45, maximum amount to be spent.

¹ Should permit the purchase of *all the tools* for specified period.
When only part of these tools is purchased ~~the~~ expenditure should be proportional.

Exhibit No. 35.—Equipment for Men Training as Tailors.

1 pair shears (large).
 1 pair shears (small).
 1 tape measure.
 1 ruler.
 1 small square.
 1 basting puller.*
 1 reaping knife.
 Assorted sizes of needles.
 2 thimbles.

\$20, maximum amount to be spent.²

Exhibit No. 36.—Equipment for Men Training as Clothing Cutters.

1 1½-yard stick.
 1 crooked stick.
 1 square (wooden tailor type).
 1 tape measure.
 1 pair scissors.
 1 thimble.
 1 large cloth shears.
 1 cutting knife, and blades.
 Marking lead.

\$30, maximum amount to be spent.²

² Should permit the purchase of all the tools. When only part of these tools is purchased the expenditure should be proportional.

*Exhibit No. 37.—Equipment for Men Training as
Pattern Cutters (Clothes).*

1 $1\frac{1}{4}$ -yardstick.
1 crooked stick.
1 pair cutter shears.
1 pair trimmers.
1 tape measure.
1 tailor's square.
Marking lead.

\$25, maximum amount to be spent.²

*Exhibit No. 38.—Equipment for Men Training as
Shoe Repairmen.*

1 jack set complete, with lasts, short arm, etc.
3 skivers No. 1, 2, and 3.
3 knives.
2 heel shavers.
1 scratch bone.
1 stitch cutter.
1 heel remover.
1 welt knife.
1 shoulder strap.
2 hammers.
2 peg awl hafts.
1 dozen sewing awls, assorted sizes.
1 dozen peg awls.
1 nail cup.
1 crispin rasp.

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

- 1 oilstone.
- 1 round edge slip oilstone.
- 1 nail set.
- 1 pair nippers.

\$45, maximum amount to be spent.²

Exhibit No. 39.—Equipment for Men Training as Barber.

- 2 razors.
- 1 pair scissors.
- 1 hone.
- 1 strap.
- 1 dustbrush.
- 1 hairbrush.
- 1 comb.
- 1 shaving mug.
- 1 shaving brush.
- 1 pair tweezers.
- 1 pair clippers.

\$25, maximum amount to be spent.²

Exhibit No. 40.—Equipment for Men in Training as Piano Tuners and repairmen.

- 1 improved extension hammer, star head.
- 1 tuning hammer, square head.
- 1 tuning-pin extractor.
- 1 punch for broken tuning pins.
- 1 punch for drawing tuning pins.
- 1 straight action regulator and handle.

² Should permit the purchase of all the tools. When only part of these tools is purchased the expenditure should be proportional.

- 1 spoon bender and handle.
 - 1 regulating screw driver, 3½-inch handle.
 - 1 regulating screw driver, 7-inch handle.
 - 1 key spacer and handle.
 - 1 straight back check spacer and handle.
 - Tweezers, 6-inch.
 - Damper felt scissors.
 - 1 string lifter.
 - 1 tuner's wedge.
 - 1 tuning fork.
 - 1 felt knife.
 - 1 felt picker.
 - 1 double head screw driver and handle.
 - 1 hammer shank extractor.
 - Key pliers.
 - 1 pocket glue pot.
 - 1 wire gauge (music wire).
 - 1 tuner's roll bag or carrying case (approximate cost \$10).
 - 1 iron plane.
 - Pliers, flat-nose.
 - Bernard nippers.
 - 1 screw holder.
 - 3 ivory clamps for tops.
 - 2 ordinary screw drivers.
- \$65, maximum amount to be spent.²**

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

Exhibit No. 41.—Equipment for Men in Training as Embalmers.

Blood gooseneck, tubing and cut-off.

Pump.

Metal spear-point needle, 14 inches long.

Metal spear-point needle, 12 inches long.

Metal spear-point needle, $9\frac{1}{2}$ inches long.

Cardiac needle, $7\frac{1}{2}$ inches long.

Parietal needle.

Pen-point needle, 6-inch (eye or infant trocar).

Hypodermic needle, with hypodermic bulb and cut-off.

Cavity exhausting tube, metal.

2 nozzles.

Nasal packer, bone handle.

Separator, ivory handle.

Director.

Forceps, large size.

Needle forceps, with catch.

Artery and vein expander, favorite.

Ligating forceps.

Scissors.

Scissors, curved on point.

Chin supports, set of 2.

2 nasal tubes, metal, large and small.

Scalpel, bone handle.

Bistouri, bone handle.

Aneurism, bone handle.

Silk flexible tube.

Razor.

Lather brush.

Lather cup, rubber.

Razor strop.

Hairbrush.

Comb, hard rubber.

Sponge.

Sponge bag.

12 yard-spool wax artery thread.

3 patent-eye surgeon needles.

1 grip (approximate cost \$35).

\$75, maximum amount to be spent.²

Exhibit No. 42.—Equipment for Men in Training as Plumbers.

1 bending iron.

1 bit brace.

1 set of bits $\frac{1}{2}$, $\frac{3}{4}$, and 1 inch.

Extension bit, 2 blades, $\frac{7}{8}$ to 3 inches.

1 joint runner.

1 joint runner clamp.

1 pair lead-pipe cutters.

1 rasp.

1 flat file.

1 brass pipe wrench.

1 strap pipe wrench.

1 soldering copper.

1 $1\frac{1}{4}$ -inch drift plug.

1 $1\frac{1}{2}$ -inch drift plug.

1 plumb bob.

1 8-inch level.

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

- 1 14-inch Stillson wrench.
- 1 10-inch Stillson wrench.
- 1 set of calking irons, set of 10.
- 1 cold chisel.
- 1 wood chisel.
- 1 keyhole saw handle and blades.
- 1 pair of snips, 10-inch.
- 1 pair of dividers, 8-inch.
- 1 hack-saw frame.
- 1 1-pound ball peen hammer.
- 1 1-pound claw hammer.
- 1 12-inch monkey wrench.
- 1 6-foot rule.
- 1 3-inch ladle.
- 1 1½-inch bending spring.
- 1 shave hook.
- 1 tap borer.
- 1 tool bag (approximate cost \$10).

\$50, maximum amount to be spent.²

² Should permit the purchase of *all the tools*. When only part of these tools is purchased the expenditure should be proportional.

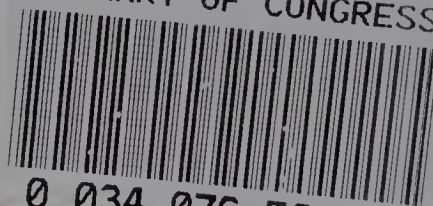


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